

FiOS and the Homeowner's Network

By Hunter Newby



At this point Verizon's "cable-killer" service, FiOS, is well-known in the networking news clips and highlights as being a major disruptive service be-

cause it is a video led consumer bundle coming from the old-school telephone company riding on fiber to the home. What an interesting and powerful combination. It is truly revolutionary and smart, but some of the really smart stuff is what you might not see, or even read in the news.

The physics of mass video over Internet Protocol to the home is easily managed by fiber as the physical layer transport media. The choice of fiber was made easy for Verizon and other RBOC's with Broadband Relief which was granted to them by the FCC several years ago. Broadband Relief is protection of the investment in fiber and other assets for the RBOC's so that they do not have to share any of the new network that they build with any of their competitors. This is something they clearly wanted for without it they would not have invested billions of dollars to bring fiber to millions of homes.

The decision to invest in fiber was easy after the FCC grant, but the process in getting the grant wasn't so easy. Line sharing, or the requirement for a physical network owner to open up the network for other networks to access and use, as been an issue ever since the Consent Decree. What is the true definition of "open?" Certainly something that is called open needs also to be physically

accessible. In addition, what about the ongoing support requirements? These and many other unforeseen questions have now become a piece of our collective history for better or worse and we have learned, some more than others, about the rules, rights and realities of physical networks and their value. Extracting the value is the secret.

Verizon knew that they would not be able to get the kind of return on investment they wanted if they had to share their fiber with everyone else. They argued against having to share based on the cable companies having franchises in their serving areas that gave them monopolies where they didn't have to share access on their physical networks. The position was that the coaxial cable networks were the cable companies' and the legacy copper networks of the RBOC's were basically for every other competitive carrier to use, but the burden of the RBOC to maintain. That part makes sense enough.

It is no wonder that the RBOC's have shed, or tried to, every piece of those legacy copper networks – except for the copper itself which they try to reclaim and sell at \$3.50+ a pound! So, The RBOC's brought the request for relief on new investment in fiber to the FCC and in a squeeze play allowed the CLEC's riding on their copper to keep on riding if the RBOC's could get the protection they sought. The FCC said okay. Three months later the RBOC's took away UNE-P and those copper-based, shared-line CLEC's lost everything. Ouch – that smarts!

All the while the cable companies continued to enjoy their protection and isolation in the video world. Not a care in the world did they have until it was realized that the telephone companies would be getting into video. With all of the

trucks, man-power, right-of-way and political connections the RBOC's have the cable companies quickly realized they had trouble. In addition to that threat there was another group of annoying little upstart service providers offering something called Voice over Broadband and they were using the public Internet to "sneak in" and gain access to the cable company's customers using the cable company's own Internet Access service. How dare they do that!

Well how about that! Someone figured out how to use the Internet to connect people to services. Isn't that what it is all about? Actually, it is not if you're in the business of charging people for access. And so the dirty little secret of physical network access to the "public" Internet came out. The "public" Internet is not a public utility and "Net Neutrality" is not about the Internet at all, but rather access to it. Possession is nine tenths of the law.

These attacks on the cable companies were motivation enough for them to introduce their own voice services and combat the incumbent telephone companies in their core service and revenue streams and also fight back against the public Internet-line sharing VoBB providers. The cable VoBB services were very successful in taking RBOC POTS customers, which the RBOC's were very thankful for as it made their lives much easier in retiring those old wires and paving the way through education and awareness of what VoIP and VoBB actually is and that it works. This too helped the RBOC's because as they introduced their VoBB service bundle WITH video the consumers were ready to accept the idea. As for the standalone public Internet VoBB providers, they still exist of course, but they will

never really be able to offer a bundle and that hurts their ability to grow as we all now know.

Enter present day and Verizon's success in winning video franchises in cities and states where the cable companies once reigned supreme. Once the regulatory hurdles are crossed they begin bringing in the fiber. They bring it to the streets, to the poles, to your home. Interesting though, they do not bring it in your home. If they do not bring it in the

cant value to Verizon. It is not only how they get to the actual network endpoints to turn-up service and begin billing the customer, but it is also a huge piece of labor and material that they do not have to spend money to create. All of those small, little miniature last-foot coax cable networks add up to what could potentially be several billion dollars in additional expense and most certainly delays in time-to-revenue if they needed to be built.

What Verizon is doing is clearly line

er or political connections to do anything about it, so no consideration is given to their position, interests, assets, or just claims. This is no different in any other similar situation. As a unified group of home network owners it would probably be a much different scenario as it has been for many other groups of individuals that have banded together in the past.

The downside would be that those individuals that speak up about this (innocent I'm sure) lapse of clear notification

The “public” Internet is not a public utility and “Net Neutrality” is not about the Internet at all, but rather access to it. Possession is nine tenths of the law.

home all the way to the televisions and computers then how does it work? How does it get there?

Verizon FiOS uses the homeowners existing in-home coax cable “network”. Yes, that coax in your house that the cable company probably installed years ago. That raises a very interesting question: who owns the coax in your house? Is it the cable company? They put it in there, or maybe a subcontractor for the cable company that did the installation, but does that make it theirs? Or is it the homeowner's? The homeowner did pay for the service and in many cases “leased” a cable box, but the coax cable line from the demarcation point outside of the house was just a physical material installed to carry the signal and no specific lease was assigned to it. There were never any rules about having to return the coax as there were about returning the cable box. One thing is very clear though: It is not Verizon's coax.

Now isn't that interesting! Obviously the existing in-home coax has signifi-

sharing, but it doesn't seem that they asked permission of the FCC, or anyone to do it officially. That is odd given how sensitive they have been about others sharing their lines in the past. Their effort to get protection on their fiber so that no one else could share it is clear. Their action to kick the CLEC's off of their existing copper to the home is clear. Verizon definitely understands the issue and value of the concept of using existing physical network infrastructure.

Maybe Verizon has it in their FiOS agreement that you allow them to access and use the homeowner network for free forever as a condition of receiving the service. Good deal for them. That would certainly fall under the category of “fine print.” They probably don't clearly explain that up front and the permission is not explicitly gained, or granted. “Down and dirty” is a term that comes to mind.

Believing that this attitude and approach will succeed comes down to the point of “who is the end user”? Each single individual is not seen as having any pow-

of use of the homeowner network would probably not be able to get FiOS. That would mean that they wouldn't be able to have 100 channels in HD and super fast Internet speeds so they can download their favorite movies 24/7/365 and chat with their friends in social networks and play Xbox 360 Live and everything else that goes along with being a connected human these days. Maybe there is a way to get fair compensation for the value that the homeowner network brings without upsetting the new world order too much, but that's probably not how Verizon would see it.

For now the coax remains hidden in the walls. It might just be that secret buried treasure in your wall that you always hope you will find every time you do a renovation. I guess what we can't see we don't know and what we don't know can't hurt us, right? **IP**

Hunter Newby is a monthly contributor to IP Business and can be reached at hunternewby@gmail.com.